



**STRATEGY  
RESEARCH  
PROJECT**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**THE U.S. ARMY WAR COLLEGE  
A MODEL LEARNING ORGANIZATION FOR THE ARMY?**

DTIC QUALITY INSPECTED 2

**BY**

**COLONEL PETER J. BUCHA**  
United States Army

**DISTRIBUTION STATEMENT A:**

Approved for public release.  
Distribution is unlimited

19960610 017

**USAWC CLASS OF 1996**



**U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050**

USAWC STRATEGY RESEARCH PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

THE U.S. ARMY WAR COLLEGE  
A MODEL LEARNING ORGANIZATION FOR THE ARMY?

by

Colonel Peter J. Bucha  
United States Army

Doctor Robert M. Murphy  
Project Advisor

U.S. Army War College  
Carlisle Barracks, Pennsylvania 17013

DISTRIBUTION STATEMENT A:  
Approved for public  
release. Distribution is  
unlimited.

## ABSTRACT

AUTHOR: Peter J. Bucha (COL), USA

TITLE: The U.S. Army War College - A Model Learning  
Organization For The Army?

FORMAT: Strategy Research Paper

DATE: 9 April 1996 PAGES: 48 CLASSIFICATION: Unclassified

Former Chief of Staff of the Army General Gordon Sullivan, challenged the 43rd Commandant of the U.S. Army War College (USAWC), Major General Richard Chilcoat, to make the USAWC the model learning organization for the U.S. Army. To determine the progress being made to achieve this goal, this study used the perceptions of the college's students, faculty and leaders and compares them to the characteristics of a learning organization. Additionally, the study also lists traits consistent and inconsistent with a learning organization as perceived by survey responders.

## Table of Contents

List of Tables.....	v
Section	
I	<b>Introduction</b>
	Overview.....1
	Purpose.....2
	Definition of a Learning Organization.....3
II	<b>Survey Construction</b>
	Overview.....4
	Preliminary Planning.....4
	Determination of Survey Content.....5
	Question Construction.....6
	Wording of Questions.....6
	Pretesting the Survey.....6
III	<b>Survey Administration</b>
	Methodology.....7
	Survey Instrument.....8
IV	<b>Survey Analysis</b>
	Overview.....10
	Analysis of Quantitative Responses.....11
	Analysis of Student Qualitative Responses.....20
	Analysis of Faculty Qualitative Responses.....21
	Analysis of Leadership Qualitative Responses....22
V	<b>Conclusions</b>
	Overview.....24
	Learning Environment.....24
	Communications.....25
	Committees.....26
	Competency and Training.....26
	Senge's Five Disciplines.....27
	Summary.....29
VI	<b>Recommendations.....30</b>
Appendix	
A -	Glossary.....38
B -	Cover Letter.....42
C -	Survey Instructions.....43
D -	Survey Questions.....44
E -	Traits Consistent With a Learning Organization..47
F -	Traits Not Consistent With a Learning Organization.....48
Bibliography.....	49



## LIST OF TABLES

Table	Page
1. Survey Participation Rate.....	8
2. Qualitative Questions Participation Rate.....	9
3. Questions On Learning Environment (All Groups).....	12
4. Questions On Communications (All Groups).....	14
5. Faculty and Leadership Questions On Communications.....	16
6. Questions On Committees (All).....	17
7. Questions On Faculty Committees (Faculty and Leaders)....	18
8. Question On Faculty Competency (All).....	19
9. Faculty and Leadership Questions On New Faculty Training.	19



## SECTION I

### Introduction

#### Overview

In 1991 the U.S. Army was the major factor in defeating the Iraqi forces in one of the fastest, most one-sided wars in history.<sup>1</sup> The U.S. Army, was without a doubt, the world's premier land force.<sup>2</sup> Today, the U.S. Army is much smaller than that premier land force that defeated Saddam Hussein in 1991; it has shrunk in size from 780,000 to 517,000.<sup>3</sup> In addition, the Army's annual budget has dropped from \$90 billion in FY 90 to under \$60 billion in FY 96.<sup>4</sup>

Why has there been such a drastic change? The answer lies in the changes that have evolved in the international security environment and the subsequent changes to the National Military Strategy. With the demise of the Soviet Union the security challenges of a bipolar world have been replaced with a more ambiguous and uncertain environment. The 1995 National Military Strategy derived from the National Security Strategy and the Bottom-Up Review is a strategy of flexible and selective engagement. It requires the Armed Forces to maintain its capability to fight and win two nearly simultaneous regional contingencies, while at the same time selectively using its military capabilities to advance national interests. To achieve these missions, the U.S. military is tackling these security challenges as it continues to restructure and reduce the size of its force.<sup>5</sup>

Former Chief of Staff of the Army General Gordon Sullivan, who was at the Army's helm when many of these changes took place, compares the Army to a business in that it is in a volatile and inscrutable world.<sup>6</sup> General Sullivan said, "We are trying to change the organization to do things we can't even understand."<sup>7</sup> General Sullivan's vision, Force XXI, started the Army on a course to be an adaptive, flexible, learning enterprise.<sup>8</sup> He feels leader development is key to the success of Force XXI and that leader development involves more than individuals; it involves the whole culture of the Army as a learning organization.<sup>9</sup>

In July 1994, Major General Richard Chilcoat became the 43rd Commandant of the U.S. Army War College (USAWC).<sup>10</sup> General Sullivan's charter to the new commandant included making the Army War College the Army model for a learning organization.<sup>11</sup>

### **Purpose**

The purpose of this study is to measure the progress the USAWC has made in becoming a model learning organization. A foundation is laid by defining a learning organization and explaining the thought process behind the construction of the survey used to elicit the perceptions of students, faculty and leaders of the USAWC. Survey results are analyzed and used to measure how well the Army War College is perceived to have met General Sullivan's challenge of becoming the Army's model for a learning institution.

## Definition of the Learning Organization

What is a learning organization? The Fifth Discipline Fieldbook, describes the learning organization as follows:

A learning organization is an organization whose members are continually focused on enhancing and expanding their collective awareness and capabilities. In other words, an organization that can learn. The core of a learning organization is based on five 'learning disciplines'.

- **Personal Mastery:** The ability to expand our personal capacity to create the results we most desire, and creating an environment in an organization which encourages all its members to develop themselves toward the goals and purposes they choose.

- **Mental Models:** Reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions.

- **Shared Vision:** Building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.

- **Team Learning:** Transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual member's talents.

- **Systems Thinking:** A way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems. This discipline helps us to see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world.<sup>12</sup>

In general, Senge's five disciplines state that people need to be open and honest with others (personal mastery), adjust their old ways of thinking (mental models), form a plan everyone agrees on (shared vision), work together to achieve this vision (team learning), and understand how the organization really works (systems thinking).<sup>13</sup>

## SECTION II

### Survey Construction

#### Overview

The survey used in this study was constructed using the following steps: preliminary planning, determination of survey content, selection of question forms, wording of questions, and pretesting.<sup>14</sup> This section briefly explains each of the above steps and their impact on the final product. Appendix A lists important terms and definitions used throughout the study.

#### Preliminary Planning

The first step used in constructing the survey was to review the objectives of the study in order to develop questions that produce responses that fulfill these objectives.<sup>15</sup> The primary objective was to collect data that provides insights as to whether the USAWC is perceived to be a model learning organization. A secondary objective was to identify traits of the Army War College that are both consistent and inconsistent with the traits of a learning organization.

A cover letter was designed that assured survey participants their responses were confidential.<sup>16</sup> Appendix B is a copy of the cover letter that accompanied each survey. The understanding of several operational definitions by each participant was critical to the survey's success.<sup>17</sup> Appendix C is a copy of the survey instructions and definitions given to survey participants.

### **Determination of Survey Content**

Questions within the survey focus on the primary goal of measuring the U.S. Army War College's performance as a learning organization with a secondary goal of finding traits that are both consistent and inconsistent with the traits of a learning organization. This is accomplished by asking the sample groups questions about themselves and each of the other groups.

### **Question Construction**

Two types of questions were used in the survey, open-ended or quantitative questions and rating scale or qualitative questions. The first 21 questions formed the core of the survey and required answers from a numerical rating scale that ranged from a score of 1-strongly disagree to 7-strongly agree with a middle score of 4-neither agree or disagree. The numerical rating scale was chosen because it is easy to fill out, reliable, and amenable to statistical analysis.<sup>18</sup>

The final two questions were open-ended allowing participants to express their candid views if desired. This type of response allows for the collection of hard data from the sample groups.<sup>19</sup> It is important to note that participants were given the opportunity not to answer questions in both sections of the survey. Questions 1-21 each offered a choice of 8-N/A if a participant did not desire to answer a question or if a participant felt they did not have enough expertise to answer a question. Questions 21 and 22 were introduced with the stipulation that the participant should return the survey with

these questions blank if they felt they could not answer the questions. At Appendix D is a copy of the survey questions.

### **Wording of Questions**

The wording of survey questions is important in that if not done correctly it can bias a survey participant.<sup>20</sup> The positive use of question stems was used for all questions to keep the survey as simple as possible. Unambiguous, simple questions is the goal of each question in the survey.

### **Pretesting the Survey**

In order to insure the survey is clear and fulfills the intent of the research, a pretest of the instrument is conducted.<sup>21</sup> The pilot surveys of the pretest were distributed to six individuals of the target population. All six pretest subjects were instructed to read the survey and comment on the clarity, ambiguity and bias of each question as well as the survey instructions. Following the return of pilot surveys interviews were conducted with each pretest participant to clarify written comments. Using pretest input from the pilot subjects, the survey instrument was improved accordingly.

### SECTION III

#### Survey Administration

##### Methodology

Administration of the survey was accomplished by asking selected individuals to complete the survey and return it within ten days. Participation was voluntary and confidential. Surveys were given out through the USAWC distribution system and returned in the same manner.

For the purpose of the survey the Army War College was divided into three sample groups; resident U.S. students, faculty instructors and school leadership. Three resident U.S. students were chosen randomly from each of the 20 seminars for a student sample size of 60 or about 20% of the total population of 282 U.S. students. Faculty instructors are defined as any member of the Army War College staff and faculty who instructs resident students.<sup>22</sup> Participants were randomly selected from four groups of faculty instructors; Department of Command Leadership and Management(DCLM), Department of Military Strategy Planning and Operations(DMSPO), Department of National Strategy and Security(DNSS), and all other faculty instructors. Approximately 20% of each faculty instructor group was selected, for a total of 19 participants. Participants were selected randomly from each of the four instructor groups to avoid bias. Because of the small number in the third sample group, Army War College leadership, all 19 members of the USAWC Command Group were asked to participate.<sup>23</sup>

Table 1 gives total response data and response rate for each sample group.

Sample Group	SURVEY PARTICIPATION RATE		
	Surveys Distributed	Surveys Returned	Percent Returned
Students	60	47	78%
Faculty	19	17	89%
Leadership	19	16	84%
Total	<u>98</u>	<u>80</u>	<u>82%</u>

**TABLE 1**

### Survey Instrument

The survey instrument was developed to gather both quantitative and qualitative data. Quantitative data is most useful in determining central tendencies within groups. The first section of the survey (questions 1-15) uses quantitative methods in questioning all three sample groups. Section two (questions 16-21) gathers quantitative data from the faculty and leadership sample groups.

Qualitative data captures information about personal opinions and ideas. The open-ended questions of section three, although optional, gave all three survey sample groups the opportunity to respond. In each sample group a certain number of participants opted not to answer the open-ended questions. Table 2 shows the number of survey responders that answered the qualitative or open-ended questions.

**QUALITATIVE QUESTIONS PARTICIPATION RATE****Sample Group**

	Surveys Returned	Ques 22&23 Completed	Per Cent Completed
Students	47	36	77%
Faculty	17	13	76%
Leadership	16	15	94%
Total	<u>80</u>	<u>64</u>	<u>80%</u>

**TABLE 2**

## SECTION IV

### Survey Analysis

#### Overview

Survey data is analyzed in two general categories, quantitative and qualitative. In both categories data is analyzed within and between three sample groups: students, faculty and leadership.

Section one (questions 1-15) asks all three sample groups to respond while section two (questions 16-21) asks only faculty and leadership sample groups to answer survey questions. In analysis of the survey's quantitative sections the major statistical tools used are the mean, mode and median score of each question response. The mean is defined as the sum of the scores in a distribution divided by the number of scores.<sup>24</sup> It is the most sensitive index of central tendency and can sometimes be misleading when examining a distribution because one or two high or low scores may "pull away" the balance point from where most of the scores are clustered.<sup>25</sup> The median is the midpoint or midscore in a distribution. It is that point above or below which one half the scores fall.<sup>26</sup> The mode is the most frequent score in a distribution. In the case where there is no single mode the distribution is said to be bi-modal, tri-modal, or multi-modal as the case may be.<sup>27</sup>

Qualitative questions are asked in section three (questions 22 and 23) of the survey. Analysis of these open-ended questions is done by grouping responses in each sample group by frequency.

Tendencies and trends are compared within and between sample groups. Responses are also analyzed with respect to Senge's five disciplines.

### **Analysis of Quantitative Responses**

Analysis of quantitative responses is accomplished by grouping questions and responses into one of four categories: learning environment, communications, committees, and faculty competency. These categories were chosen in order to focus quantitative responses towards controversial areas of the USAWC with which all survey participants were familiar. Responses in each category are analyzed within and between applicable sample groups. Each category is accompanied by a table that includes the questions pertaining to that category and statistics on the responses of each sample group. These tables also give overall statistics for the total of all sample groups who responded to a question. Responses of N/A are not included in the overall statistical analysis. Included at the top of each table is the response scale used by responders in answering all quantitative questions.

### **Learning Environment**

Questions 1,2 and 4 of the survey are categorized as questions whose responses reflect perceptions of the sample population about the USAWC learning environment. Table 3 lists the three questions and gives statistics on responses. Learning environment is the only category in which all sample groups answered the same questions.

### QUESTIONS ON LEARNING ENVIRONMENT (ALL GROUPS)

1	2	3	4	5	6	7	8
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree	N/A
1. The learning environment at the Army War College encourages open and candid discussion of key issues.							
STUDENT			FACULTY			LEADERSHIP	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
6.37	7	7	6.12	6	7	6.38	7 7
6.32			6.32			7 7	
2. Seminar learning is the key ingredient in the Army War College student learning environment.							
STUDENT			FACULTY			LEADERSHIP	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
6.13	6	7	6.18	7	7	6.19	6 6
6.15			6.15			6 7	
4. During lecture question and answer sessions, students feel unconstrained when asking guest lecturers questions.							
STUDENT			FACULTY			LEADERSHIP	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
4.46	4	5	4.53	5	5	4.19	4 3
4.42			4.42			5 5	

**TABLE 3**

The overall mean score for the responses to question one was 6.32, the highest in the survey. This question also received the only multiple seven score for median and mode. Faculty responders were the only sample group not to give this question their top response; they gave it the second highest rating among their survey responses.<sup>28</sup>

All sample groups also agreed that seminar learning is the key ingredient in the USAWC learning environment. Responses to this question ranked second highest in overall mean response scores. Faculty responders gave this question their top response while students and leadership ranked it second.<sup>29</sup>

Students and faculty slightly agreed (33% answered 5) with question 4, which stated students feel unconstrained in asking tough questions during guest lecture question and answer sessions. Leadership's most frequent response (44%) was a 3 which showed a slight disagreement.<sup>30</sup>

### **Communications**

Questions on communications made up over half of the quantitative questions in the survey (11 of 21). Nine questions in this category were directed at all participants while two of the questions pertained only to faculty and leaders. Table 4 lists survey questions and response statistics for the questions on communications addressed to all survey participants.

Questions 5 and 7 examined communications between students and faculty.<sup>31</sup> Eighty-six percent of all survey participants disagreed that students have problems communicating with faculty in their seminar. Likewise, 78% disagreed that faculty has problems communicating concerns to students.<sup>32</sup>

Question 6 measured perceptions about students using the chain of command if they are not satisfied with faculty actions. In general, all sample groups slightly agreed that students would use the chain of command if they were not satisfied with faculty actions. Neutral responses were given by 25% of the responders while 17% disagreed with the question.<sup>33</sup>

**QUESTIONS ON COMMUNICATIONS (ALL GROUPS)**

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

5. **Students have a problem** communicating concerns and issues to faculty in their seminar.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
2.48	2	2	2.50	2	2	2.62	2	2	2.51	2	2

6. **Students** will use the chain of command if they are **not satisfied** with how the faculty handles it.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
4.96	5	6	4.79	5	4/5	4.68	5	4/5	4.85	5	4/6

7. The **faculty has a problem** communicating concerns and issues to students.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
2.65	2	2	2.82	3	3	3.60	3	3	2.87	3	2

8. **Student** feedback is used to **improve** the Army War College learning environment.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
5.23	5	6	5.18	5	5	5.69	6	6	5.31	5	6

9. The **Student Council and Seminar Leaders** are used by students to voice concerns.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
5.59	6	6	5.47	5	5	5.46	6	6	5.54	6	6

10. Student issues and concerns are communicated to the Army War College leadership by the **Student Council and Seminar Leaders**.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
5.48	6	6	5.36	5	5	5.80	6	5/6	5.52	6	6

11. Army War College **leadership** considers Student Council and Seminar Leader input when making **key** decisions.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
4.71	4	4	4.71	5	5	5.13	6	6	4.80	5	4

14. If something about the Army War College really bothered me, I would write the Commandant an **E-mail** message.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
4.61	5	7	4.59	5	5/7	6.25	7	7	4.93	6	7

15. Military culture (i. the chain of command) **inhibits** open communication at the Army War College.

STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
3.35	3	2	4.18	3	3	2.94	3	3	3.44	3	3

TABLE 4

Question 8 examined perceptions about the use of student feedback for improving the USAWC. The majority of responders in each group felt student feedback is used. Over 48% responded with a rating of 6 or 7.<sup>34</sup>

Survey questions 9, 10, and 11 examined the effectiveness of the Student Council and Seminar Leaders in their role of communicating student concerns to leadership. The overall mean and mode for both questions 9 and question 10 was 6. Five percent of responders disagreed with question 9 and 3% with question 10. Agreement was lower when asked to rate the leadership's use of input from these two groups to make key decisions. The overall median score for question 11 was 5 one score below the median score of questions 9 and 10. The mode for this question was 4 two full ratings below the other two questions on effectiveness of Student Council and Seminar Leaders.<sup>35</sup>

Question 14 in this section examined whether or not responders themselves would use e-mail to contact the commandant if something really bothered them. Student and faculty responses were similar, their mean scores were 4.61 and 4.59 indicating they slightly agreed. Nine percent of student responders strongly disagreed that they would contact the commandant while 31% strongly agreed they would contact him. The leadership mean score was 6.25, with a median of 6 and mode of 7.<sup>36</sup>

Although the majority of participants disagreed with question fifteen's premiss that military culture (i. the chain of command) inhibits open communication at the USAWC, a considerable

number agreed or gave a neutral response. A quarter of the students, 35% of the faculty, and 16% of the leaders indicated a perception that military culture inhibits communications at the USAWC. Neutral responses accounted for 28% of the total responses.<sup>37</sup>

Table 5 gives the questions and response statistics for questions 16 and 17 which pertain only to the faculty and leadership sample groups. Seventy-one percent of the faculty responders agreed they feel unconstrained communicating concerns

FACULTY AND LEADERSHIP QUESTIONS ON COMMUNICATIONS							
1	2	3	4	5	6	7	8
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree	N/A
16. The faculty feels <b>unconstrained</b> communicating concerns and issues up the chain of command.							
FACULTY			LEADERSHIP			OVERALL	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
5.0	5	7	5.5	6	6	5.24	6 6
17. Faculty feedback is used to <b>improve</b> the Army War College learning environment.							
FACULTY			LEADERSHIP			OVERALL	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
5.35	6	5/6	5.5	6	6	5.42	6 6

TABLE 5

and issues up the chain of command. Two leaders slightly disagreed, and all other leader ratings were five or better. Leadership responses to question 17 were identical to their responses to question 16, while faculty responses for question 16 were slightly higher than those they made to question to question 17.<sup>38</sup>

## Committees

The use and effectiveness of committees is the third quantitative category analyzed. Table 6 gives questions and statistics for survey questions 12 and 13. These questions were answered by all sample groups but only addressed student committees. The overall statistics show that responders slightly agree that student committees are the best way for students to solve problems. Leadership responses to this question showed a higher level of agreement than student and faculty responders. The overall mean, median and mode for question 13 was 4.07, 4 and

QUESTIONS ON COMMITTEES (ALL)											
1	2	3	4	5	6	7	8				
Strongly			Neither Agree			Strongly	N/A				
Disagree			Nor Disagree			Agree					
12. Student committees are the best way to solve student problems.											
STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
4.50	5	5	4.44	4/5	4/5	4.88	5	6	4.56	4	5
13. There are too many student committees at the Army War College.											
STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
4.07	4	4	4.33	4	4	3.87	4	4	4.07	4	4
TABLE 6											

TABLE 6

4 respectively. This indicates that the survey responders neither disagree nor agree that there are too many student committees at the USAWC.<sup>39</sup>

Table 7 shows statistics on faculty and leadership perceptions about faculty committees at the USAWC. Faculty responses show slight agreement with the question 18 survey issue

that faculty committees impact on key decisions made by leadership at the USAWC. Leadership responses were stronger in

QUESTIONS ON FACULTY COMMITTEES (FACULTY AND LEADERS)							
1	2	3	4	5	6	7	8
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree	N/A
18. Faculty committees at the Army War College impact on key decisions made by the Army War College Leadership.							
FACULTY			LEADERSHIP			OVERALL	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
4.81	5	5/6	5.56	5	5	5.19	5 5
19. There are too many faculty committees at the Army War College.							
FACULTY			LEADERSHIP			OVERALL	
Mean	Med	Mode	Mean	Med	Mode	Mean	Med Mode
4.56	4	4/7	4.56	5	3	4.56	4 3

TABLE 7

their agreement; only one leadership response was neutral, with all the rest agreeing at one level or another that faculty committees did impact on key decisions.<sup>40</sup>

Both faculty and leadership responders slightly agreed that there are too many faculty committees at the USAWC. The bimodal score for this question shows that four faculty responders strongly agreed there were too many committees and four were neutral.<sup>41</sup>

### Faculty Competency

The final category addressed in the quantitative section is faculty competency. All sample groups gave perceptions about technical competence but only the faculty and leadership groups were queried about new faculty training. Table 8 gives data on

QUESTION ON FACULTY COMPETENCY (ALL)											
1	2		3	4		5	6	7		8	
Strongly Disagree				Neither Agree Nor Disagree				Strongly Agree		N/A	
3. Faculty instructors are technically competent in what they present/facilitate.											
STUDENT			FACULTY			LEADERSHIP			OVERALL		
Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode	Mean	Med	Mode
5.83	6	6	4.88	5	4/5	4.80	5	5/6	5.42	6	6

**TABLE 8**

responses to survey question 3 while table 9 gives the same analysis for survey questions 20 and 21.

Over 91% of the students responding to the survey agreed that faculty instructors are technically competent in what they present/facilitate while 59% of the faculty and 67% of the

FACULTY AND LEADERSHIP QUESTIONS ON NEW FACULTY TRAINING									
1	2	3	4	5	6	7	8		
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree		N/A	
20. <u>New faculty training</u> prepares new faculty members to be faculty <u>instructors</u> in the seminar environment.									
FACULTY			LEADERSHIP			OVERALL			
Mean Med Mode			Mean Med Mode			Mean Med Mode			
3.70 4 3/5			4.0 4 5			3.84 4 5			
21. <u>New faculty training</u> prepares new faculty members to be faculty <u>advisors</u> in the seminar environment.									
FACULTY			LEADERSHIP			OVERALL			
Mean Med Mode			Mean Med Mode			Mean Med Mode			
3.71 3 3			3.57 3 2/5			3.71 3 3			

TABLE 9

leadership responders agreed. The mean, median and mode scores for students were one point higher than the faculty and leadership scores.<sup>42</sup>

Faculty and leadership responses to question 20 and 21 show a slight disagreement by both sample groups with these survey items. The overall mean score for question 20 is 3.84 while question 21's was 3.71.<sup>43</sup>

### **Analysis of Student Qualitative Responses**

In the qualitative section of the survey students were given Peter Senge's definition of a Learning Organization and asked to name three traits found at the Army War College consistent with the definition and three traits that are not consistent with the definition. Student response rate to this section of the survey was 77% (36 of the 47 students who returned surveys answered the open-ended questions). Although students were asked for three traits some chose to give more and some only gave one or two.<sup>44</sup>

Appendix E, lists the most frequent student responses for traits at USAWC consistent with Senge's definition (survey question 22). Seminar learning, or learning from the experiences of other students and faculty in the seminar, was the trait of a learning organization perceived most often by students to be present at USAWC. Eighty-three percent of the students who answered the qualitative questions mentioned this trait. The second trait most mentioned by students is the open, honest, and non-judgmental atmosphere at the USAWC; 36% of student responders mentioned this trait. Freedom to choose advance courses (25%),

thinking out of the box (19%), and guest lecturer program (19%), rounded out the top five learning organization traits perceived by students to be found at the USAWC.<sup>45</sup>

Student responses for traits at USAWC not consistent with Senge's definition (survey question 23) were more distributed than responses to question 22. Appendix F, lists the most frequent responses made by students. A feeling that the mandatory Strategy Research Program does not fit into the USAWC adult education concept was mentioned by 36% of the students answering this question. Eleven students (31%) mentioned two inconsistent traits. First, they said there was too much teaching of the school solution, vice original thought and thinking out of the box. Secondly they responded that too many requirements are top driven. Six students (17%) felt that an atmosphere of collegiality was attempted but failed because of military culture, i. rank. Five student responders (14%) mentioned that learning is sometimes restricted because of the schedule. For example, a good discussion is forced to end because of other commitments by the person leading the discussion. The final inconsistency was mentioned by four students (11%) who perceived that too many of the guest lecturers at USAWC give Rotary Club talks and steer away from the tough issues.<sup>46</sup>

#### **Analysis of Faculty Qualitative Response**

Almost 25% of the faculty opted not to answer the qualitative questions. The faculty's most popular answer to question 22 was the same as the student responders. Seven of the

thirteen faculty who responded also felt seminar learning was a trait found at USAWC. Open, honest and non-judgmental atmosphere and thinking out of the box were traits chosen by 31% of the faculty responders. The ability to create, experiment and discover was listed by 8% of the faculty which was their fourth most popular answer.<sup>47</sup>

The trait most frequently mentioned by faculty that is not consistent with the definition of a learning organization was that there is too much conflict between departments (54%). Forty-six percent of the faculty who responded to question 23 said the leadership/academic board were out of touch with the curriculum and seminar learning. Three faculty responded that there were too many top-down driven requirements. The SRP, high turnover rates, and the leadership's desire for a 100% solution before making changes were three inconsistent traits mentioned by two faculty responders.<sup>48</sup>

### **Analysis of Leadership Qualitative Responses**

Leaders responded at a 94% rate to questions 22 and 23, the highest response rate of the three sample groups. Their top response for question 22 was equally split between seminar learning (47%) and the open, honest and non-judgmental atmosphere (47%). The commandant's vision/future focus was mentioned by 33% of the faculty. Physical resources, collegiality, and the ability to create, experiment and discover were selected by 20% of the leaders as traits of a learning organization found at the USAWC.<sup>49</sup>

The top response not consistent with a learning organization was the adverse effect of the military culture; 73% of the leaders wrote in this response. Conflict between departments was noted by 33% of the leaders and too many top driven requirements was mentioned by 27% of the 16 leaders who responded to this question. Three leaders felt the refusal to change without a 100% solution was an inconsistent trait while two leaders mentioned the curriculum was too structured and there was too much teaching of school solutions.<sup>50</sup>

## SECTION V

### Conclusions

#### Overview

This section summarizes the survey analysis of the previous sections, presents conclusions and gives a brief summary. Conclusions are presented on the four general categories: learning environment, communications, committees and competency with respect to both the quantitative and qualitative survey results. In addition, qualitative responses consistent and not consistent with Senge's five disciplines are listed by discipline. Based on the analysis of quantitative and qualitative data and the tendencies/disparities a brief summary is provided.

#### Learning Environment

All survey sample groups agreed that the learning environment at the USAWC is open, candid and non-judgmental. Furthermore, their responses indicate that seminar learning is the key ingredient of the USAWC learning environment.<sup>51</sup> The freedom to think out of the box, create, experiment, and discover are some of the traits of a learning organization that create this learning environment at the USAWC. Guest lecturers who talk to tough issues are key to keeping the learning environment current. Freedom to choose advanced courses and outstanding physical resources are two other traits mentioned in open-ended responses that enhance this learning environment.<sup>52</sup>

Traits mentioned by responders that detract from the learning environment are faculty who teach the school solution

and leave no room for original thought. And restrictions in learning caused by class schedules that in some cases interrupt dialogue and strategic thought.<sup>53</sup>

### **Communications**

Creating a team environment is important in all organizations; at the USAWC communications up and down the chain of command is an important part of creating this team environment.<sup>54</sup> Survey responses to questions 5 and 7 indicate that communications between students and faculty at the USAWC is not a significant problem. The mean, median and mode scores of question 6 show that in most cases all sample groups perceive that students will use the chain of command to surface issues if not satisfied with faculty actions. Responses to questions 9 and 10 indicate that Student Council and Seminar Leaders are good vehicles to voice concerns to the school leadership.<sup>55</sup> Faculty and leadership responses to questions 16 and 17 indicate that lines of communications between them are open and that faculty feedback is used by leadership to improve the USAWC.<sup>56</sup>

On the negative side the quantitative responses of faculty and leaders indicate that inter-departmental communications are poor and that competition between departments causes conflicts that are detrimental to the USAWC.<sup>57</sup>

Responses to question 14 show all groups agreed they would use e-mail to communicate with the Commandant if something really bothered them. However, the mean, median and mode scores of leadership responders were significantly higher than the

student and faculty scores indicating they were more comfortable with this procedure.<sup>58</sup>

The number of students (25%), faculty (35%), and leaders (16%) who responded in agreement with question 15 indicates that military culture does inhibit communications at the USAWC.<sup>59</sup> Qualitative responses suggest that rank is usually the underlying factor and that although efforts are made to disregard rank in the interest of learning it never does completely disappear. Several responders from each sample group remarked that although collegiality is attempted it falls short because rank is usually in the back of your mind.<sup>60</sup>

### **Committees**

Quantitative responses for all survey groups with respect to student committees were neutral. Neither group felt strongly about their use or number.<sup>61</sup>

Faculty and leadership responses to question 18 show slight agreement with the statement that faculty committees impact on key decisions made by the USAWC leadership.<sup>62</sup> In addition, the bi-modal scores of the faculty (4/7) for question 19 indicate some uncertainty as to the number of faculty committees needed at the USAWC.<sup>63</sup>

No responses in the qualitative section of the survey addressed student or faculty committees.<sup>64</sup>

### **Competency and Training**

Students agreed at a higher rate (91%) than faculty (59%) and leaders (67%) that faculty instructors are technically

competent. Responses from all sample groups indicate a perception that faculty instructors are competent.<sup>65</sup> With respect to faculty training, however, responses from both faculty and leaders indicate new faculty instructor and advisor training needs to be improved.<sup>66</sup>

### **Senge's Five Disciplines**

For each of Senge's five disciplines the traits most frequently mentioned in appendixes E and F, both for and against, are listed under the discipline they best fit as interpreted by the author. Several responses pertain to more than one of the disciplines and therefore will be listed more than once.

**Personal Mastery** - those traits mentioned by responders that are consistent with this discipline are: Seminar learning; open, honest and non-judgmental atmosphere; freedom to choose advanced courses; physical resources, collegial atmosphere; ability to experiment, create, discover; and the qualification and initiative of the faculty. Responses that were not consistent with this discipline centered around the Strategy Research Program (SRP). Responders did not feel the administration of this requirement fit the adult education model because not all members of the USAWC institution were involved in the development of the goals and purpose of the SRP.<sup>67</sup>

**Mental Models** - those traits consistent with this discipline are: opportunity to think out of the box; enrichment by superior guest lecturers who were candid and took on the tough issues; and the future focus and vision presented by the commandant. Those

responses not consistent with this discipline are: too much teaching of the school solution from manuals vice adjusting the old methods to new ideas and trying to think out of the box; restriction of learning by rigid adherence to schedules or regulations; the curriculum is too structured and doesn't offer students and faculty enough flexibility; and that leaders and the academic board are not tuned into the latest concepts and ideas.<sup>68</sup>

**Shared Vision** - responder tendencies consistent with this discipline include: seminar learning; guest lecturer program; Commandant's vision/future focus; and USAWC outreach programs. Responses not consistent are: too many top driven requirements and poor guest speakers.<sup>69</sup>

**Team Learning** - this discipline matched with the following responses: seminar learning, collegiality and outreach programs. Perceptions of traits at the USAWC not consistent with this discipline are: the hierarchial structure brought on by military structure of the college; and the inability of departments to share.<sup>70</sup>

**Systems Thinking** - the opportunity to comment on each course and give feedback for improvement of future courses is a trait that supports this discipline. This trait is in line with the Army's "after action review (AAR)" process that has been so successful at combat training centers around the world.<sup>71</sup> A trait that is not consistent with this discipline is the desire to have complete consensus and a 100% solution before making a change.<sup>72</sup>

A trait not consistent with a learning organization that affects each of the five disciplines is the high turnover rate among the USAWC faculty. Key military instructors and leaders are trained and become very proficient only to change station or retire before their proficiency can be fully utilized.<sup>73</sup>

### Summary

In conclusion, it appears the U. S. Army War College is moving toward becoming a learning organization as defined by Peter Senge. As is the case with any institution that is evolving to one form of operation from another, a continued struggle is necessary in order to have each facet of the organization inculcate the values, structure and processes of the new system. The U. S. Army War College is in the midst of this struggle. Identifying the progress is important and a major question would have to be whether or not there is a system in place to assess the progress of the institution toward "their" vision of a learning organization. In reviewing the results of the open-ended questions, it appears that the present system is loosely structured and evolutionary in nature with no checks and balances in place.

## SECTION VI

### Recommendations

The conclusions drawn from this study appear to beg several actions that need to be taken by the United States Army War College in order for it to secure a firmer grip on becoming the "nation's preeminent center for strategic leadership and landpower" through the use of a learning organization strategy. These actions are presented as recommendations. It is recognized that some of these actions may already be underway, but based on the data that the researcher has had access to, the following recommendations appear reasonable:

1. **Formulate an assessment structure from which to assess progress toward fulfilling the vision.** The rationale for this statement is based on an apparent lack of a formalized system to assess the affect that various factors have on developing a climate for a "learning organization". Curriculum, faculty success, planned activities both academic and social need to be assessed in order to determine their affect on achieving the vision through the use of a learning organization strategy. Many institutions, especially educational ones, have a tendency to add programs and activities without tracking the success, as determined by the institution, of their critical factors. According to Middle States Association of Colleges and Schools, "Institutions should develop guidelines and procedures for assessing their overall effectiveness..."<sup>74</sup> They continue the point by stating that educational excellence needs to be

predicated on the effectiveness of faculty, administration and governing boards to raise "...questions about institutional effectiveness, seek answers, and significantly improve procedures light of their findings."<sup>75</sup> In summary, it appeared that the comments from those surveyed gave the impression that a loose system of tracking the critical success factors of the institution were in place. Although there are year-end survey instruments taken, the question becomes whether , or not, they are used to focus the institution on their vision quest.

**2. To analyze the formal, and/or informal, survey system to determine whether it fulfills the perceived assessment void stated above.** Specifically, a study needs to be undertaken to determine if the characteristics of a learning organization are keyed to the methods of gathering data.

**3. To replicate this study using next year's students, faculty and administrators in order to verify the reliability of the findings drawn in this study.**

THIS PAGE INTENTIONALLY LEFT BLANK

## ENDNOTES

1. Scales, Robert H., Certain Victory: The U.S. Army in the Gulf War, Fort Leavenworth, Kansas: U.S. Army Command and General Staff College Press, 1994, 382.

2. Smith, Lee. "New Ideas From The Army (Really)", Fortune, 19 September 1994, 203.

3. Department of Defense, Defense 95 Almanac, Issue 5 (1995): 17.

4. Ibid., 11.

5. Department of Defense, National Military Strategy of the United States of America: A Strategy of Flexible and Selective Engagement, Washington, DC: U.S. Government Printing Office, 1995, i.

6. Smith, 204.

7. Ibid.

8. Ibid., 203.

9. Sullivan, Gordon, Army Chief of Staff, LEADERS FOR A LEARNING ORGANIZATION, Chief of Staff Article, Washington, DC, 25 March 1994, 1.

10. USAWC Curriculum Pamphlet: Academic Year 1996, Carlisle, PA: U.S. Army War College, 1995, intro.

11. U.S. Army War College Commandant Richard Chilcoat, "Vision for the "Fourth" Army War College...the USAWC of the 21st Century," memorandum for All Friends of the U.S. Army War College, Carlisle PA, 4 October 1995, 24.

12. Senge, Peter M., Art Kleiner, Charlotte Roberts, Richard B. Ross, and Bryan J. Smith, The Fifth Discipline Fieldbook, New York: Doubleday, 1994, 6.

13. Dumaine, Brian, "MR. LEARNING ORGANIZATION", Fortune, 17 October 1994, 148.

14. U.S. Army Research Institute for the Behavioral and Social Sciences, Fort Hood Field Unit Systems Research Laboratory, Questionnaire Construction Manual (Alexandria, VA, June 1989) 3.

15. U.S. Army Research Institute for the Behavioral and Social Sciences, Fort Hood Field Unit Systems Research Laboratory, Questionnaire Construction Manual, Alexandria, VA, June 1989, 14.

16. United States General Accounting Office, Program Evaluation and Methodology Division, Developing and Using Questionnaires, Washington, DC, July 1986, 135.

17. Questionnaire Construction Manual, 75.

18. Ibid., 32.

19. Ibid., 24.

20. Labaw, Patricia, Advanced Questionnaire Design, Abt Books: Cambridge, Massachusetts, 1980, 154.

21. Developing and Using Questionnaires, 68.

22. United States Army War College Resident Student Manual Academic Year 1996 Administrative and Curricular Policies and Procedures, Carlisle, PA: U.S. Army War College, 1995, 1-10.

23. Ibid., 1-2.

24. Williams, Frederic, Reasoning With Statistics How to Read Quantitative Research. Harcourt Brace Jovanovich College Publishers, Fort Worth, 1992, 38.

25. Ibid, 39.

26. Ibid, 38.

27. Ibid.

28. Learning Environment Survey Response Data , compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

29. Ibid.

30. Ibid.

31. Learning Organization Survey, Jan 96, U.S. Army War College, Carlisle, PA, 2.

32. Communications Survey Response Data (all groups) , compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

33. Ibid.

34. Ibid, 2.
35. Ibid.
36. Ibid, 3.
37. Ibid, 3.
38. Communications Survey Response Data (faculty and leadership), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
39. Student Committee Survey Response Data (all groups), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
40. Faculty Committee Survey Response Data (faculty and leaders), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
41. Ibid.
42. Faculty Competency Survey Response Data (all), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
43. New Faculty Training Survey Response Data (faculty and leaders), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
44. Student Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
45. Ibid.
46. Ibid, 2.
47. Faculty Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
48. Ibid.
49. Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
50. Ibid, 2.
51. Learning Environment Survey Response Data , compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.
52. Student, Faculty and Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

53. Ibid.

54. Zenger, John H., Ed Musselwhite, Kathleen Hurson, and Craig Perrin, Leading Teams, Mastering the New Role. Business One Irwin Homewood, Illinois, 1994, 155.

55. Communications Survey Response Data (all groups), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

56. Communications Survey Response Data (faculty and leadership), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

57. Ibid.

58. Communications Survey Response Data (all groups), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

59. Ibid.

60. Student, Faculty and Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

61. Committee Survey Response Data (all groups); Committee Survey Response Data (faculty and leaders), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

62. Ibid.

63. Ibid.

64. Student, Faculty and Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

65. Competency Survey Response Data (all groups), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

66. Faculty Training Survey Response Data (all groups), compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

67. Student, Faculty and Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

68. Ibid.

69. Ibid.

70. Ibid.

71. Smith, 204.

72. Student, Faculty and Leadership Qualitative Survey Results, compiled on 24 February 1996, U.S. Army War College, Carlisle, PA.

73. Ibid.

74. Staff,. (1994). Characteristics of Excellence in Higher Education. Philadelphia, PA.: Commission on Higher Education, Middle States Association of Colleges and Schools, 16.

75. Ibid.

## Appendix A

### GLOSSARY

**Chain of Command** - the layers of authority in an organization an individual must go through before reaching the top. For example your immediate supervisor, his/her supervisor and so on.

**Command Group** - Army War College leaders to include the Commandant, Dep Cmdt, Dep Cmdt Int Affairs, Secretary, Chief of Staff, Dean, Strategic Planner, Department Heads, Directors, ARNG Advisor, USAR Advisor and Senior Service Representatives.

**Communications** - the ability to converse with and understand the people and systems around you. The flow of information within an organization.

**Department of Command, Leadership and Management (DCLM)** - resident teaching department responsible for Personal Assessment Programs; leadership and management portions of the core curriculum; and selected advanced courses.

**Department of Military, Strategy Planning and Operations (DMSPO)** - resident teaching department which plans, develops, and conducts instruction in the core curriculum on the implementation of national military strategy. DMSPO also manages and teaches the Advanced Warfighting Studies Program, and teaches advanced courses.

**Department of National, Strategy and Security (DNSS)** - resident teaching department responsible for the national defense portion of the core curriculum, advanced courses, the Military History program, and regional studies.

**Faculty Committee** - group of faculty formed from the organizations within the Army War College. Provide recommendations and perspectives on issues that cut across departmental responsibilities.

**Faculty Competency** - that Faculty Instructors are technically proficient in what they present/facilitate and can communicate this proficiency to students.

**Faculty Advisor** - member of the Army War College staff who advises resident students and is responsible for writing their academic efficiency report.

**Faculty Instructor** - member of the Army War College staff who instructs resident students; instruction can take place during Term I core curriculum or Term II and III advanced courses.

**Faculty Sample Group** - All faculty who act as Faculty Instructors during AY 96 for a resident USAWC course.

**Force XXI** - a vision of where the U.S. Army will be in the 21st century. A focus for changing the force and doctrine using the latest technology.

**Key Decisions** - critical decisions made by the Army War College leadership that affect the student learning environment.

**Leadership** - Army War College leaders to include the Commandant, Dep Cmdt, Dep Cmdt Int Affairs, Secretary, Chief of Staff, Dean, Strategic Planner, Department Heads, Directors, ARNG Advisor, USAR Advisor and Senior Service Representatives.

**Learning Environment** - the setting created in which people learn. Includes physical resources, attitudes, competence and expertise.

**Learning Organization** - an organization where members collectively continue to expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together.

**Lecture Question and Answers (Q&A)** - period of time at the USAWC following a guest lecture presentation during which students are given the opportunity to ask questions.

**Mean** - the sum of the scores in a distribution divided by the number of scores. It is the most sensitive index of central tendency and can sometimes be misleading when examining a distribution because one or two high or low scores may "pull away" the balance point from where most of the scores are clustered.

**Median** - the midpoint or midscore in a distribution. It is that point above or below which one half the scores fall.

**Mental Models** - Reflecting upon, continually clarifying, and improving our internal pictures of the world, and seeing how they shape our actions and decisions.

**Mode** - the most frequent score in a distribution. In the case where there is no single mode the distribution is said to be bi-modal, tri-modal, or multi-modal as the case may be.

**Open-ended Question** - questions that require a written answer from a responder. Responses capture information about personal opinions and ideas.

**Qualitative Question** - the same as an open-ended question.

**Quantitative Question** - questions that require a response that is marked on a rating scale. Analysis of responses is easily adapted to statistical processes.

**Personal Mastery** - The ability to expand our personal capacity to create the results we most desire, and creating an environment in an organization which encourages all its members to develop themselves toward the goals and purposes they choose.

**Pilot Survey** - survey distributed to a small group of typical responders. Used to test the clarity and understanding of a survey. Feedback from the pilot survey is used to improve the survey instrument.

**Response Scale** - answer scale used for quantitative questions;

1	2	3	4	5	6	7	8
Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree	N/A

**Seminar** - group of 16 students and three faculty members from DCLM, DMSPO and DNSS who work together throughout the academic year. In AY 96 there are 20 seminars. Each seminar normally consists of 9-10 Active Component Army officers, a sea service officer (either Marine, Navy, or Coast Guard), an Air Force officer, 1-2 Reserve Component Army officers, a U.S. Government civilian, and two international fellows.

**Seminar Leader** - student selected by faculty teaching team who serves as the key information link between the seminar group and the class president. He is responsible for administrative matters concerning the seminar group.

**Seminar Learning** - basic organization for learning at the USAWC. Optimize active learning opportunities by the sharing of ideas, experience and knowledge between the students and faculty of the seminar. Roughly 80 percent of contact hours during an academic year is spent in the seminar.

**Shared Vision** - Building a sense of commitment in a group, by developing shared images of the future we seek to create, and the principles and guiding practices by which we hope to get there.

**Student** - Resident U.S. students of the U.S. Army War College for Academic Year 1996.

**Student Council** - consists of the class president, vice president for Reserve Components, vice president for international fellows, vice president for civilian students, treasurer and secretary.

**Strategy Research Program (SRP)** - designed to broaden and deepen students appreciation of strategy and national and international policy issues. Established as a major academic program for the resident course to support that core function. U.S. students' research on a topic of their choice will culminate in a written report of their research results in a paper of not less than 4500 words and not more than 6000 words. Each resident student will complete a SRP prior to graduation.

**Survey Sample Groups** - Individuals from a homogeneous group who are selected to participate in a survey. In this survey students, faculty and leaders are the three survey sample groups.

**Systems Thinking** - A way of thinking about, and a language for describing and understanding, the forces and interrelationships that shape the behavior of systems. This discipline helps us to see how to change systems more effectively, and to act more in tune with the larger processes of the natural and economic world.

**Team Learning** - Transforming conversational and collective thinking skills, so that groups of people can reliably develop intelligence and ability greater than the sum of individual member's talents.

**United States Army War College (USAWC)** - the final step in the Army's formal professional military education (PME) of its officers. Prepares selected military, civilian and international leaders to assume strategic responsibilities in military or national security organizations. Educates students on the unique role of landpower, and the U.S. Army, acting alone or as part of a unified, joint, or multinational force in support of the national military strategy. For the purpose of this study only pertains to the academic part of Army War College to include all activities with respect to resident students.

**Appendix B  
Cover Letter**

**S: 16 Feb 96**

MEMORANDUM FOR SELECT ARMY WAR COLLEGE FACULTY, STAFF AND STUDENTS

SUBJECT: Survey to Support SRP: Is the Army War College a Learning Organization?

1. Request your assistance in support of my SRP by taking the time to complete this survey. You have been selected as part of a sample group to participate in this survey and your response is **critical** to the success of the survey and my SRP. **Survey results will be briefed to the school leadership and used to make the Army War College a more user friendly and progressive institution.**

2. Your response to the survey is completely anonymous. Your name cannot be associated with any response you make within the survey.

3. Request you complete the attached survey and return to me, **Pete Bucha (Box 67), by 16 Feb 96.** Thank you in advance for your time and effort. If you would like information on the results of this survey, please let me know. I will be glad to give you a copy of the final report.

Peter J. Bucha  
COL, QM

Atch

Data required by the Privacy Act of 1974, mandatory or voluntary disclosure:

Participation in this research is voluntary. Individuals are encouraged to provide complete information in the interest of research. There will be no effect on individuals for not providing information. All responses are non-attributable.

## Appendix C Survey Instructions

### INSTRUCTIONS

1. Please answer questions 1 through 21 by putting a circle around the number above the response you believe to be most correct. Use the N/A response if you feel you cannot answer the question or if the question does not pertain to you.
  
2. Please answer questions 22 and 23 by putting your honest thoughts in the space provided. If you do not feel you can answer these two questions leave blank and return the questionnaire with the first 21 responses.

### DEFINITIONS

**Army War College** - pertains to the academic part of Army War College to include all activities with respect to resident students.

**Army War College Leadership** - Command Group to include the Commandant, Dep Cmdt, Dep Cmdt Int Affairs, Secretary, Chief of Staff, Dean, Strategic Planner, Department Heads, Directors, ARNG Advisor, USAR Advisor and Senior Service Representatives.

**Faculty Advisor** - member of the Army War College staff who advises resident students and is responsible for writing their academic efficiency report.

**Faculty Instructor** - member of the Army War College staff who instruct resident students; instruction can take place during Term I core curriculum or Term II and III advanced courses.

**Key Decisions** - critical decisions made by the Army War College leadership that affect the student learning environment.

**Learning Organization** - an organization where members collectively continue to expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together.

**Students** - all resident Army War College students.

## Appendix D Survey Questions

### QUESTIONS 1 - 15 ARE FOR ALL SURVEY PARTICIPANTS

For the purpose of survey control please circle the sample category you fit.  
If you are a student please enter your Seminar #.

a) Leadership                      b) Faculty                      c) Student (Seminar # \_\_\_\_\_)

1. The learning environment at the Army War College **encourages** open and candid discussion of key issues.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

2. **Seminar learning** is the **key** ingredient in the Army War College student learning environment.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

3. Faculty instructors are **technically competent** in what they present/facilitate.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

4. During lecture question and answer sessions, students feel **unconstrained** when asking guest lecturers questions.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

5. **Students have a problem** communicating concerns and issues to faculty in their seminar.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

6. **Students** will use the chain of command if they are **not satisfied** with how the faculty handles it.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

7. The **faculty has a problem** communicating concerns and issues to students.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

8. **Student** feedback is used to **improve** the Army War College learning environment.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

9. The **Student Council and Seminar Leaders** are used by students to voice concerns.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

10. Student issues and concerns are communicated to the Army War College leadership by the **Student Council and Seminar Leaders**.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

11. Army War College **leadership** considers Student Council and Seminar Leader input when making **key** decisions.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

12. **Student committees** are the **best** way to solve student problems.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

13. There are **too many student committees** at the Army War College.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

14. If something about the Army War College really bothered me, I would write the Commandant an **E-mail** message.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

15. Military culture (ie. the chain of command) **inhibits** open communication at the Army War College.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

**QUESTIONS 16 - 21 ARE FOR STAFF AND FACULTY ONLY**

16. The faculty feels **unconstrained** communicating concerns and issues up the chain of command.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

17. **Faculty feedback** is used to **improve** the Army War College learning environment.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

18. **Faculty committees** at the Army War College **impact** on **key** decisions made by the Army War College Leadership.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

19. There are **too many faculty committees** at the Army War College.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

20. **New faculty training** prepares new faculty members to be faculty **instructors** in the seminar environment.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

21. **New faculty training** prepares new faculty members to be faculty **advisors** in the seminar environment.

1	2	3	4	5	6	7	8
Strongly			Neither Agree			Strongly	N/A
Disagree			Nor Disagree			Agree	

Using Peter Senge's definition of a learning organization, please answer questions 22 and 23 by putting your honest thoughts in the space provided. If you do not feel you can answer these two questions leave blank and return the questionnaire with the first 21 responses.

#### DEFINITION OF A LEARNING ORGANIZATION

According to **Peter Senge** in his book, **The Fifth Discipline**, a **learning organization** is an organization where members collectively continue to expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free and where people are continually learning how to learn together.

22. Name **three** traits at the Army War College that are consistent with Senge's concept of a **learning organization**?

- 1.
- 2.
- 3.

23. Name **three** traits of the Army War College that are inconsistent with Senge's concept of a **learning organization**.

- 1.
- 2.
- 3.

## Appendix E

### Tendencies Consistent With a Learning Organization

TRAITS	*STUDENT # (%)	**FACULTY # (%)	***LEADER # (%)	****TOTAL # (%)
1. Seminar Learning	30(83%)	7 (41%)	7(47%)	44(69%)
2. Open, honest & non-judgemental atmosphere	13(36%)	4 (31%)	7(47%)	24(24%)
3. Freedom to choose advanced courses	9 (25%)			9 (11%)
4. Thinking out of the box	7 (19%)	4 (31%)	2(23%)	13(16%)
5. Guest lecturer program	7 (19%)			7 (9%)
6. Physical resources	5 (14%)	1 (8%)	3(20%)	9 (11%)
7. Collegiality	4 (11%)	2 (15%)	3(20%)	9 (11%)
8. Opportunity to give course feedback	4 (11%)		1 (7%)	5 (6%)
9. CMDT's vision/future focus	3 (8%)	1 (8%)	5(33%)	9 (11%)
10. Ability to experiment, create, discover	1 (3%)	3 (23%)	3(20%)	7 (9%)
11. Faculty qualification & initiative	1 (3%)	2 (15%)		3 (4%)
12. Outreach programs			2(13%)	2 (3%)

Note: \* 36 of 47 students responded (77%)  
 \*\* 13 of 17 faculty responded (76%)  
 \*\*\* 15 of 16 leaders responded (94%)  
 \*\*\*\* 64 of 80 survey participants responded (80%)

## Appendix F

### Tendencies Not Consistent With a Learning Organization

TRAITS	*STUDENT # (%)	**FACULTY # (%)	***LEADER # (%)	****TOTAL # (%)
1. SRP Doesn't Fit Adult Learning Concept	13(36%)	2 (15%)		15(23%)
2. Too Much Teaching of School Solution	11(31%)	1 (8%)	2(13%)	14(22%)
3. Too Many Top Driven Requirements	11(31%)	3 (23%)	4 (27%)	18 (28%)
4. Military Culture Hampers Initiative	6 (17%)		11(73%)	17(27%)
5. Learning Sometimes restricted by Schedule	5 (14%)			5 (8%)
6. Guest Speakers Give Party Line	4 (11%)			4 (6%)
7. Curriculum Too Structured	2 (6%)	1 (8%)	2(13%)	5 (8%)
8. Too Much Conflict Between Departments	1 (3%)	7 (54%)	5 (33%)	13 (20%)
9. Leaders and Academic Board Out of Touch		6 (46%)		6 (9%)
10. High Turnover Rate		2 (15%)	1(7%)	3 (5%)
11. Change Comes Too Slow, Always Want a 100% Solution		2 (15%)	3 (23%)	5 (8%)

Note: \* 36 of 47 students responded (77%)  
 \*\* 13 of 17 faculty responded (76%)  
 \*\*\* 15 of 16 leaders responded (94%)  
 \*\*\*\* 64 of 80 survey participants responded (80%)

## BIBLIOGRAPHY

- Ball, H.P. Of Responsible Command: A History of the U.S. Army War College. Carlisle, PA: U.S. Army War College Alumni Association, 1994.
- Bolman, Lee G., and Terrence E. Deal. Reframing Organizations - Artistry, Choice, and Leadership. San Francisco: Jossey-Bass, 1991.
- Chilcoat, Richard, U.S. Army War College Commandant, "Vision for the "Fourth" Army War College...the USAWC of the 21st Century," Memorandum for All Friends of the U.S. Army War College, Carlisle PA, 4 October 1995.
- Chilcoat, Richard, U.S. Army War College Commandant, "Commandants Perspectives," Briefing Given at USAWC Vision Offsite, Carlisle, PA, 16 February 1996.
- Chilcoat, Richard, U.S. Army War College Commandant, STRATEGIC ART: THE NEW DISCIPLINE FOR 21st CENTURY LEADERS, Strategic Studies Institute, U.S. Army War College, Carlisle, PA, October 10, 1995.
- Department of Defense, Defense 95 Almanac, Issue 5 (1995): 11-19.
- Department of Defense. National Military Strategy of the United States of America: A Strategy of Flexible and Selective Engagement. Washington, DC: U.S. Government Printing Office 1995.
- Department of the Air Force, AF Pamphlet 13-2. The Tongue and Quill. Washington: HQ USAF/DA, 1973
- Dumaine, Brian. "MR. LEARNING ORGANIZATION." Fortune, 17 October 1994, 147-157.
- Dixon, N. The Organizational Learning Cycle. London: McGraw-Hill Book Company, 1994.
- Goldman, Steven L., Roger N. Nagel, and Kenneth Preiss. Agile Competitors and Virtual Organizations. New York: Van Nostrand Reinhold. 1995.
- Haback, Herbert F., and Keller, Ulrich H., "Learning Leader XXI." Military Review, Vol LXXV, May-June 1995: 30-38.
- Hock, Dee W. "The Chaordic Organization: Out of Control and Into Order." World Buisness Academy Perspectives 9, no. 1(1995): 5-17.

- Labaw, Patricia. Advanced Questionnaire Design. Abt Books: Cambridge, Massachusetts, 1980.
- Marquant, Michael, and Angus Reynolds. The Global Learning Organization. New York: Irwin. 1994.
- Nogami, G.Y., Brief on Curriculum Assessment, Calisle, PA: U.S. Army War College 1995.
- Nogami, G.Y., L.J. Baum and J.R. Vetock, U.S. Army War College 2000: Army Senior Officer Education. Carlisle, PA: U. S. Army War College 1992.
- Nogami, G.Y., J. Colestock, and T.A. Phoenix, U.S. Army War College Alumni Survey: Graduates from 1983-1989. Calisle, PA: U.S. Army War College 1991.
- Nogami, G.Y., and Robert J. Davis, Report on the Survey of USAWC Graduates From Academic Years 1983-1987. Calisle, PA: U.S. Army War College 1989.
- Nogami, G.Y., K. Heller, and C Wentzel, U.S. Army War College Graduates: 1983-1991 Education For Strategic Leadership (Draft). Calisle, PA: U.S. Army War College 1995.
- O'Neil, J. "On Schools as Learning Organizations: A Conversation With Peter Senge". Educational Leadership, April 1995, 20-23.
- Pappas, G.S. Prudens Futuri: The U.S. Army War College 1901-1967. Calisle, PA: Alumni Association of the U.S. Army War College, 1967.
- Report of the Panel on Joint Professional Military of the Chairman, Joint Chiefs of Staff, A Strategic Vision for the Professional Military Education of the Twenty-first Century, 1995.
- Report on the U.S. Army War College Military Education Level 1 (MEL-1) Resident and Corresponding Studies Courses, Carlisle, PA: U.S. Army War College, 1990.
- Root, E. Ceremonies at the Laying of the Cornerstone of the U.S. Army War College Building cited in G.S. Pappas (1967), Prudens Futuri: The U.S. Army War College 1901-1967, 1903.
- Scales, Robert H., Certain Victory: The U.S. Army in the Gulf War. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College Press, 1994.

- Schein, Edgar H., "The Process of Dialogue: Creating Effective Communicatio." The Systems Thinker, vol 5, No 5, June/July 1994, 13-16.
- Senge, P.M. The Fifth Discipline. New York: Doubleday, 1990.
- Senge, Peter M., Art Kleiner, Charlotte Roberts, Richard B. Ross, and Bryan J. Smith. The Fifth Discipline Fieldbook. New York: Doubleday, 1994.
- Smith, Lee. "New Ideas From The Army (Really)". Fortune, 19 September 1994, 203-212.
- Solomon, Charlene, Marmer. "HR Facilitates the Learning Organization Concept." Personnel Journal, November 1994, 56-66.
- Staff, . Characteristics of Excellence in Higher Education. Philadelphia, PA.: Commission on Higher Education, Middle Atlantic States Association of Colleges and Schools, 1994.
- Sullivan, Gordon. Army Chief of Staff. LEADERS FOR A LEARNING ORGANIZATION, Chief of Staff Article, Washington, DC, 25 March 1994.
- Sullivan, Gordon. Army Chief of Staff. "Future Vision." Military Review, Vol LXXV, May-June 1995: 4-14.
- The White House. National Security Strategy of the United States, A National Security Strategy of Engagement and Enlargement. The White House, February 1995.
- U.S. Army Research Institute for the Behavioral and Social Sciences, Fort Hood Field Unit Systems Research Laboratory. Questionnaire Construction Manual. Alexandria, VA, June 1989.
- U.S. Army War College, Report of Self Study, A Process for Accreditation of Joint Education, U.S. Army War College, Carlisle, PA. 1993.
- USAWC Curriculum Pamphlet: Academic Year 1996. Calisle, PA: U.S. Army War College, 1995.
- USAWC Program for Joint Education (PJE): Academic Year 1996. Calisle, PA: U.S. Army War College, 1995.
- United States Army War College Resident Student Manual Academic Year 1996 Administrative and Curricular Policies and Procedures. Carlisle, PA: U.S. Army War College, 1995.

United States Army War College Staff and Faculty Manual  
Administrative and Curricular Policies and Procedures.  
Carlisle, PA: U.S. Army War College, 1995.

United States General Accounting Office, Program Evaluation and  
Methodology Division. Developing and Using Questionnaires,  
Washington, DC, July 1986.

Van Creveld, Martin. The Training of Officers, From Military  
Professionalism to Irrelevance. New York: Macmillan, 1990.

Wheatley, Margaret, and Peter Senge, "The Learning Organization:  
From Vision to Reality." The Systems Thinker, vol 4, No 10,  
Dec 1993/Jan 1994, 9-12.

Williams, Frederic, Reasoning With Statistics How to Read  
Quantitative Research. Fort Worth: Harcourt Brace Jovanovich  
College Publishers, 1992.

Zenger, John H., Ed Musselwhite, Kathleen Hurson, and Craig  
Perrin. Leading Teams, Mastering the New Role. Homewood,  
Illinois: Business One Irwin, 1994.